ACCESS TO INFORMATION ON THE ENVIRONMENT IN THE UNITED STATES

by Franklin S. Reeder

Executive Summary

The report sets out the United States context, which is characterised by a long tradition of public access to and participation to government. Significant mechanisms that strengthen public access are:

– Statutes such as the Administrative Procedure Act, the Freedom of Information Act, the Federal Advisory Committee Act

– *Committee Act* and other laws which give the public more tools to learn about and to influence the activities of their government.

– Public initiatives like *Access America* that focus on providing public access to information via the Internet and electronic services.

– Private initiatives such as *America Speaks* that establishes electronic "national citizens' fora" to assist citizens in eliciting and expressing their needs directly to the national institutions.

Non-governmental organisations (NGOs) also play an important role in the US political system. However, the role of interest groups in the US policy-making process has recently come under particular scrutiny with regard to advocacy activities and campaign finance reforms.

The report also illustrates the context of the US Environmental Protection Agency (EPA). Being a relatively recent administrative creation, the EPA was devised to consolidate the federal government's environmental programmes under the jurisdiction of a single agency. The wide variety of laws for which EPA is responsible, as well as complex federal-state-local relations on environmental matters, have brought about a fragmentation of environmental programmes. EPA has sought to address the potential inefficiencies and conflicts inherent in such as structure both through its regional offices and through the use of information strategies.

The importance placed on information and public participation is evidenced by the perception of EPA as a relatively open and transparent agency. Two information strategies are in particular noteworthy:

– *Toxics Release Inventory*: The most important attribute of this programme is that, unlike many other public information programmes, public disclosure was an essential feature of the law that created TRI, not an afterthought. TRI data are available in several different forms. They are also transmitted to the public through two intermediaries – the Right-To-Know Network and the Environmental Defence Fund's Environmental Scorecard. EPA publicises the existence of these alternative ways of getting EPA information.

– *Envirofacts*: Unlike TRI, which is a statutorily based programme, Envirofacts grew out of an administrative initiative to improve the quality and utility of environmental information. Originally conceived to create a common interface for the various environmental databases of various EPA programme offices, the nature of the project changed to provide broad public electronic access to environmental information. Today, Envirofacts allows individuals to search a variety of EPA data, including TRI, by postal code in order to find information on their own neighbourhood.

At least in the short run, the increased availability of information about the environment appears to be having a greater effect on private behaviour than on public policy. However, the need for traditional approaches to consultation has not diminished, and may in fact increase as a result of greater electronic access to the policy process. **The case study was submitted to the Secretariat in 1999 and covers events up to that date.**

Introduction

This case study examines the participation of citizens (as individuals and through groups) in the activities of the United States Environmental Protection Agency (EPA), as part of the OECD Public Management (PUMA) Committee's activity on "Strengthening Government-Citizen Connections." Specifically, the study examines two EPA initiatives, Envirofacts and Toxics Release Inventory (TRI), to determine the extent to which those systems have affected the manner in which the public interacts with its government.

The methodology employed in this study was to review relevant documents and websites and to interview public officials and public interest groups representing the spectrum of interests from the environmental community to the regulated industries. A list of those interviewed, relevant web sites and publications are listed at the end of the report.

The United States Context

As a representative democracy operating under a 210 year-old Constitution, the United States has a long tradition of public access to and participation in government. In some rare instances, primarily at the local level, citizens participate directly in government decision-making through periodic community meetings, a phenomenon that has come to be known as the New England[34] town meeting. But the framers of the Constitution, concerned that geography would preclude this sort of pure, direct democracy, and perhaps a bit distrustful of the citizenry, created a representative form of government. Initially, while the lower house of the national legislature, the House of Representatives, was elected from population-based, single-member districts, members of the upper body, the Senate, were elected by the legislature of the state they represented. The Constitution was later amended to provide for direct election of senators.

While there is little question that the framers of the United States Constitution created some distance between the public and their government, developments of the latter two-thirds of the 20th century have served to strengthen public access and shorten that distance. Apart from the direct election of senators, the congress has enacted a series of laws, each of which gives the public more tools (a) to learn about; and (b) to influence the activities of their government. Among the most significant of these are:

- *The Administrative Procedure Act (APA)* This law responded to the explosive growth of government in the 1930s. With the creation of many social and economic programmes, there was an increasing tendency to enact general laws that gave agencies great discretion to develop regulations that had substantial effects on citizens and industry but that were not subject to the usual scrutiny of the legislative process. The APA required that agencies that did not have formal public rule-making processes, like the regulatory bodies that grant licences, must use a process that has come to be known as "informal rule-making," despite its obvious formality. Under informal rule-making, agencies must publish proposed rules, allow a reasonable period for public comment, and then take account of those comments in their final determinations.
- *The Freedom of Information Act (FOIA)* Reacting to growing concerns over governmental secrecy, this 1965 law requires that agencies (a) publish general directory information about how they are organised and about their routine processes; and (b) respond to public requests for agency records in a timely fashion. The law creates a legal presumption in favour of disclosure; agencies may not withhold records unless they fit within one of the exemptions enumerated in the act (*e.g.* properly classified for national security reasons, disclosure would constitute an "unwarranted" invasion of privacy, or trade secrets); even then, the withholding of information is discretionary unless otherwise required by law.
- *The Federal Advisory Committee Act (FACA)* Growth of government also caused a proliferation of boards and commissions with substantial authority and the growing use of informal advisory groups. These advisory committees often wielded substantial influence over policy by virtue of their secret, direct access to decision-makers up to and including the President. FACA gives the

public access to the deliberative processes of so-called multi-member agencies (*e.g.* regulatory boards, commissions, and advisory committees). It requires that agencies declare the existence of any advisory bodies that they create, and that those committees be "representative" of the affected constituencies. It further requires that meetings of boards, commissions, and advisory committees be announced and open to the public. Agencies may close meetings only if they fit within one of a series of exemptions similar to those in the FOIA. But even then, agencies must announce that such a meeting is planned and the reason for not allowing it to be open to the public.

– Other laws, including the Paperwork Reduction Act and the Electronic Freedom of Information Act, have expanded and strengthened the public's right to know about, if not to influence, public policy.

Beyond the enactment of laws, the landscape on which the citizen and government interact has been changed by virtue of a series of initiatives, public and private, enabled by the dramatic changes in the capability and availability of modern information and communications technology. Four of these efforts, one public and three private, are illustrative and, in and of themselves, worthy of further review:

– *Access America* This is an undertaking of Vice President Al Gore's National Partnership for Reinventing Government (previously known as the National Performance Review) and the Government Information Technology Services Board. Access America focuses on providing greater access to public services via the Internet. One public official interviewed said that, with respect to public access to information "...the glass is 90 per cent full; we are now focusing on electronic services."

– *America Speaks* This programme seeks "to create and make workable effective mechanisms for ensuring that the actions of the elected office holders reflect the will of the citizens. [It seeks to] strengthen [US] democracy by creating mechanisms that are accessible to the public and reflect the realities of the 21st century..America Speaks will take the next step in its mission by bringing together, through tele-conferencing technologies, large numbers of citizens representative of eight to ten communities across America. The goal is to elicit and express their needs directly to the national institutions. This electronic 'national citizens' forum' will combine state-of-the-art communications technology with the very best of large group change processes to enable these citizens to engage in collective deliberation and action."

– *Transactional Records Access Clearinghouse* (TRAC) "The purpose of TRAC is to provide the American people – and institutions of oversight such as Congress, news organisations, public interest groups, businesses, scholars, and lawyers – with comprehensive information about the activities of federal enforcement and regulatory agencies, and the communities in which they take place." It does so by obtaining large public databases and then creating a rich analytic capability that allows the public and the press to analyse these data. This capability has been used most extensively to date in looking at law enforcement, but its applicability to environmental data is obvious.

– *Web, White and Blue* This is another privately funded initiative to engage the public in the electoral process by creating "single click access to some of the best… online election directories and voter information sites across the Internet."

Non-governmental organisations (NGOs) have three distinct, and important, roles in the United States:

– *They aggregate and mediate public opinion for formulating public policy*. Typically, it is not the average citizen or businessperson who lobbies the US Congress; but organisations, such as Public Citizen, the AFL-CIO, Chambers of Commerce, the National Federation of Independent Business, or the Environmental Defense Fund.

– *They inform the public and often serve as an instrument of policy implementation*. Many older Americans, for example, learn about the latest changes in Medicare or Social Security by reading American Association of Retired Persons publications.

– *They independently fund and deliver services*, such as Salvation Army assistance to the needy and church-run schools.

The role of interest groups in the US policy-making process has recently come under particular scrutiny in several ways. First, a small but highly vocal faction in the US Congress has been advocating that NGOs that engage in any form of advocacy should lose their tax-exempt status and/or that severe restrictions be placed on advocacy by any group that receives public funds. Under current law, organisations that receive public funds may not use those funds for advocacy – but they are otherwise free to do so. A second area of controversy deals with the larger question of campaign finance reform. While proposals to limit political campaign contributions are not aimed at traditional NGOs *per se*, support for reform is beginning to develop among corporate donors who, in recent articles, are beginning to reveal their resentment at elected officials who make it clear that large contributions are a requirement to gaining access to the policy debate – what the corporate leaders refer to as "political blackmail." To the extent that the field has always been unbalanced (corporate and trade group donations historically far outstrip those of NGOs and their supporters), the current debate over campaign finance reform could be very important in giving NGOs a larger voice by muting the voices of others.

The Environmental Protection Agency (EPA) Context

The US Environmental Protection Agency (EPA) is a relatively recent creation. Reorganisation Plan No. 3 of 1970 was devised to consolidate the federal government's environmental regulatory activities under the jurisdiction of a single agency. President Richard Nixon transmitted the plan to Congress on 9 July 1970 and EPA formally came into existence on 2 December of that year. EPA annually spends approximately $US 8 billion and has a staff of 18 000. The mission of the EPA is "to protect human health and to safeguard the natural environment – air, water, and land – upon which life depends." It is worth noting that EPA is an administrative creation. While environmental laws enacted since 1970 have acknowledged its existence by assigning responsibilities to it, no organic law establishing EPA has been enacted. Indeed, various efforts to create EPA as a cabinet-level department have failed, although presidents have used their discretion to give the administrator of EPA cabinet status. The organisational structure of EPA can be found at its website (*http://www.epa.gov/epahome/organization/*). In addition, EPA operates through a series of ten regional offices. Each EPA regional office is responsible within selected states for the execution of the agency's programmes, considering regional needs and the implementation of federal environmental laws.

EPA is responsible for a wide variety of laws designed to deal with specific environmental threats or to protect particular media (*e.g.* air and water), some of which pre-date the creation of the agency. Among these are the National Environmental Policy Act, the Clean Air Act, the Clean Water Act, the Comprehensive Environmental Response, Compensation, and Liability Act (or Superfund – to handle hazardous waste clean-up), the Toxic Substances Control Act, the Federal Insecticide, Fungicide and Rodenticide Act , the Safe Drinking Water Act, and the Emergency Planning & Community Right-To-Know Act.

This complex of statutes has created what most acknowledge to be a rather fragmented set of programmes, with a series of programmes and organisations devoted to addressing the requirements of a specific statute or dealing only with a particular medium. EPA has sought to address the potential inefficiencies and conflicts inherent in such a structure both through its regional offices and through the use of information strategies. One such initiative, EnviroFacts, is described in greater detail below. Another, currently in the process of being implemented, is the decision of the current administrator to create a new office of information, headed by an associate administrator who would report directly to her. This new Office of Environmental Information is headed by a new assistant administrator. As of this writing, staff are being reassigned and an internal structure has been created [*http://www.epa.gov/info-org/office.htm*]. The new office is intended to improve the quality and accessibility of environmental information and to promote a more cross-media view of environmental information. This development, while beyond the scope of this case study, is certainly worth watching.

The importance placed on information and public participation as part of the agency's overall strategy is evidenced by the fact that one of the ten strategic goals in the EPA's fiscal year 2000 annual performance plan is "expansion of Americans' right to know about their environment". The plan says, in part:

> Easy access to a wealth of information about the state of their local environment will expand citizen involvement and give people tools to protect their families and their communities as they see fit. Increased information exchange between scientists, public health officials, businesses, citizens, and all levels of government will foster greater knowledge about the environment and what can be done to protect it.

Beyond organisational change and the two projects described here, Envirofacts and TRI, the EPA commitment to using information as a strategic tool is evidenced in several other projects, such as:

– *Surf your watershed*: A service to help citizens locate, share, and use specific online environmental information by providing specific information about watersheds and states.

– *Sector facility index project* An initiative to standardise facility identifiers to allow the agency and public to aggregate data by facility across media and programmes.

Federal-state-local relations on environmental matters are complex. At least notionally, environmental matters are the province of the states. The Constitution provides that any authority not specifically granted to the federal government shall be "reserved" to the states, and the Constitution, a 1789 document, does not speak of the environment. The federal government, nonetheless, has used its authority to regulate interstate commerce to intercede in environmental matters. The pressure to do so arises from several directions. First, there is the natural fact that environmental phenomena do not respect state boundaries. Air blows across states and waterways cut across political subdivisions. Second, industry often supports federal pre-emption to avoid the cost and complexity of having to comply with multiple and sometimes conflicting state regulations. Third, environmental groups have pushed for federal action since it is often difficult to galvanise the political system in a state to regulate an industry where that industry may be a dominant economic force and source of employment. As a result, states vary widely in the extent to which they are willing or able to intercede in environmental matters. In a recent case, NGOs in the State of Louisiana sued successfully in federal court to compel the US EPA to develop a clean-up programme for their state.

EPA works closely with its "state implementing partners" through the Environmental Council of States (ECOS). ECOS is the national non-profit, non-partisan association of state and territorial environmental commissioners. The mission of ECOS is to improve the environment of the United States by providing for the exchange of ideas, views, and experiences among states and territories, fostering co-operation and co-ordination in environmental management, and articulating state positions to Congress and the Environmental Protection Agency on environmental issues. One of ECOS's priorities is its environmental information management initiative, a joint effort with EPA to build locally and nationally accessible environmental information systems.

The environmental policy landscape in the United States is populated with a wide range of NGOs, some very old and based intellectually if not organisationally in early 20th century conservation movements, like the Sierra Club and the World Wildlife Fund. Others are of more recent origin, focusing more on the re-awakening in the 1960s to the dangers to the environment posed by modern technology and lifestyles, like the Environmental Defense Fund and a growing number of locally-based groups. These groups, now numbering well into the hundreds, each follow their own agendas although they come together in coalitions either around specific issues, like the risk management plan controversy discussed below, or areas of common interest, like community right to know. They range from groups that work closely with and largely in support of the EPA mission, to others who work outside of the system in a more adversarial role. The groups vary widely in their level of financing from well-financed national groups to mostly volunteer, locally based groups. Similarly, NGOs vary widely in their capacity to obtain information, smaller groups often relying on large national groups or networks or coalitions to which they belong to keep them apprised.

Even its most vociferous critics admit that EPA is a relatively open and transparent agency. It goes well beyond its legal obligations, under the Administrative Procedure Act (for regulatory development), Freedom of Information Act (for public access to information) and Federal Advisory Committee Act (for public access to advisory meetings) to make itself and its policy-setting processes open. As of the most recent annual report, EPA had 24 formal advisory committees, a number that has remained relatively constant over the past several years. It is worth noting here that both critics and supporters of the Federal Advisory Committee Act (FACA), described above, realise that, while it assures openness in the consultation process, in doing so it imposes an administrative burden on the establishment and conduct of such committees. That burden and the general pre-disposition of political administrations, including the current US Administration, to hold down the number of committees as a way of reducing costs, causes a dilemma for agencies. They find themselves having to address competing objectives, pressured to consult more extensively while holding down the number of formal committees. Despite earnest efforts to be open and accessible, there were some complaints from the NGO community that industry has disproportionate access, even in an administration perceived to be more favourably disposed to environmental interests than its predecessors. To address this perception, the current EPA administrator has instituted what has become known as "glass window" policy of making the calendars of senior EPA officials available upon request.

EPA's website (*www.epa.gov)* is widely acknowledged to be among the best in the US Government both for the richness of the substance and ease of navigation. One often critical NGO representative complimented the agency for making sure that pertinent documents were available on the agency's website. The agency uses the site as one of several tools to publicise both substantive and administrative proposals. The recent effort to seek public views on the creation of the new office of information is almost unprecedented. Most agencies would have treated this as an internal management issue and not have sought public views. Political and career staff are generally accessible and are frequent participants in meetings convened by all parties. Even during periods when the incumbent political administration was seen to be hostile to environmental interests, career staff managed to maintain constructive relationships with all parties. This is not to suggest that any of those parties expressed total satisfaction with the policy outcomes.

Toxics Release Inventory (TRI)

The Toxics Release Inventory (TRI) was created under the Emergency Planning & Community Right-To-Know Act (EPCRA). This law, enacted in 1986, was designed to help local communities protect public health, safety, and the environment from chemical hazards. EPCRA itself grew out of the tragic events in Bhopal, India and the revelation that plants with toxins not unlike those released in Bhopal existed in the US as well. The fact that, in many instances, the surrounding communities and even local emergency preparedness officials had no knowledge of what existed in their back yards caused a swift and strong political reaction.

EPCRA required each state to appoint a State Emergency Response Commission (SERC). The SERC's were required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee (LEPC) for each district. Broad representation by fire fighters, health officials, government and media representatives, community groups, industrial facilities, and emergency managers ensures that all necessary elements of the planning process are represented. Title I of the Act deals with emergency planning and notification. Title II establishes a much broader requirement:

> The owner or operator of a facility subject to the requirements of this section shall complete a toxic chemical release form ... for each toxic chemical listed [under rules set by EPA] that was manufactured, processed, or otherwise used in quantities exceeding the toxic chemical threshold quantity established by {EPA] during the preceding calendar year at such facility. Such form shall be submitted to the administrator and to an official or officials of the state designated by the Governor on or before 1 July 1988, and annually thereafter on 1 July and shall contain data reflecting releases during the preceding calendar year.

While the law initially specified a list of chemicals, established reporting thresholds and defined the industries to be covered, it gives the administrator of EPA broad authority to expand or modify those lists under criteria set forth in the law. Perhaps even more importantly, the law established strong requirements for public disclosure:

> The release forms required under this section are intended to provide information to the federal, state, and local governments and the public, including citizens of communities surrounding covered facilities. The release form shall be available... to inform persons about releases of toxic chemicals to the environment; to assist governmental agencies, researchers, and other persons in the conduct of research and data gathering; to aid in the development of appropriate regulations, guidelines, and standards; and for other similar purposes.

As one observer interviewed noted, TRI has several important and unique attributes: it (1) is facility-specific; (2) is chemical-specific; (3) provides time series data to show trends; (4) is designed for proactive dissemination in multiple media; and (5) produces data at national, state and local levels. Perhaps the most important attribute of this programme is that, unlike many other public information programmes, public disclosure was an essential feature of the law that created TRI, not an afterthought.

Nearly 70 000 reports are received annually from more than 21 000 facilities covering 643 reportable chemicals. The list of chemicals has been expanded since the law was first enacted. For the current (1998) reports, EPA has expanded the industrial sectors that must report to include mining and power companies, and a proposal to reduce reporting thresholds is under consideration.

TRI reports are submitted annually to the states and EPA on 1 July for the preceding calendar year. EPA then enters the data into its database – approximately 70 per cent of the forms are now submitted electronically. The data then go through an extensive quality control process. EPA takes the need to provide accurate data seriously. Staff take the position that it is not sufficient to claim that they have accurately recorded a report if the report was wrong. They look for anomalies and question apparently inaccurate data. Several mentioned, somewhat ruefully, an incident several years ago when a facility entered the wrong standard industrial classification code and misplaced a decimal point with the result that releases of that chemical were grossly overstated. Even though EPA had correctly captured what had been in the report it received, EPA staff asserted that their duty to ensure the integrity of the information went beyond mere accurate transcription. Summary TRI reports are issued as soon as EPA completes its transcription and verification processes. The report on the 1997 data, received by EPA in July of 1998, was issued in March of 1999 – more than eight months after the data was received and 14 months after the reporting period. EPA indicates that it expects to improve on that performance for the 1998 data, which it hopes to publish in early 2000.

TRI data are available in a number of different forms:

– Some states establish their own databases and make data available to the public. An excellent example is the Pennsylvania site, which has garnered a number of awards (*http://www.dep.state.pa.us/*).

EPA publishes TRI data in a variety of forms.

– A CD-Rom that contains all of the basic data.

– A printed report – the so-called “public data release” – containing summary tables.

– State fact sheets.

– TRI information kit.

– Fax service.

– Envirofacts (discussed below).

– Intermediaries.

Two efforts of intermediaries in disseminating TRI data are especially important.

– *The Right-To-Know Network (RTK-Net).* Operated by two non-profit groups – OMB Watch and the Unison Institute – this project was initially funded in part by EPA as a way of creating an outreach

system for environmental information. It continues to be funded by various government agencies and foundations, according to its website. Initially driven by the opportunity created by the existence of TRI, RTK-Net now describes itself as providing "free access to numerous databases, text files, and conferences on the environment, housing, and sustainable development. With the information available on RTK.NET, you can identify specific factories and their environmental effects; analyze reinvestment by banks in their communities; and assess people and communities affected."

– *Environmental Defence Fund's Environmental Scorecard*. This initiative is entirely the work of an NGO; no direct EPA funding was involved but EPA staff did provide technical consultation as they would with any user seeking to use EPA data.

Both projects serve local activists and other NGOs and each, in different ways, seeks to make EPA more "user-friendly" and thereby to encourage action based on the information. Comparing the two, perhaps in part because it is entirely independently funded, the EDF scorecard tends to be more contentious. EPA publicises the existence of these alternative ways of getting EPA information and, in interviews, staff consistently emphasised this diversity of sources and perspectives as an important component of EPA's information strategy.

Envirofacts

The Envirofacts Warehouse is a database that includes information on Superfund sites, drinking water, air pollution, toxic releases, hazardous waste, and water discharge permits. Through Envirofacts, one can get lists of facilities in one's neighbourhood are releasing pollutants or are legally handling hazardous materials, where any Superfund sites are located and what their cleanup status is, and more. In many cases, you can link to more information about the chemicals involved at the listed sites, and find out whether they are potentially harmful.

Unlike TRI, which is a statutorily based programme, Envirofacts grew out of an administrative initiative to improve the quality and utility of environmental information. Initially dubbed "Gateway", the project was conceived in the early 1990s with the objective of creating a common interface for the various environmental databases maintained by various EPA programme offices. The client, at least initially, was perceived to be EPA offices who, up to that point, did not have the tools to look across media or programme lines.

Several factors intervened to change the nature of this project. The development of the Internet and web-based technology caused the developers to abandon their mainframe computer, hard-wired network technical approach and allowed them to create a capability that could be made available to the public. Then, as part of the Clinton Administration's reinventing government effort, in March of 1995, Vice President Al Gore declared that ensuring public electronic access to environmental information was to be one of 25 key environmental actions.

Today, Envirofacts is a powerful tool that receives on average more than 50 000 requests daily. An even better indication that the system is used by more than web surfers is that, according to EPA staff, they receive hundreds of calls whenever the system is down for any reason. It allows individuals to search a variety of EPA data, including TRI, by postal code (or zipcode).

Impacts on Public Participation

The implications of projects like TRI and Envirofacts on citizen participation in government are difficult to measure. Upon closer examination, these initiatives really have two different effects:

– They provide information that will allow the user to adjust her/his behaviour. In the case of environmental information, that may affect an individual's decision on where to locate or vacation. Or it may cause changes in the behaviour of a manufacturer when it is disclosed that a plant is releasing large quantities of some toxic substance.

– They provide information that allows stakeholders to influence the actions of government. This may take the form of new laws or pressure to step up the enforcement of existing laws.

Evidence of the former (i.e., changes in private behaviour) is substantial and impressive. The latest (1997) TRI reports show that, since the first reports were issued cover 1988, total releases of the toxic chemicals has fallen from 3.4 million to slightly less than 2 million pounds. The most dramatic reduction was in air releases, which reportedly fell from 2.2 million to 1 million pounds, a drop of 55 per cent. While there is some disagreement as to the meaning of these numbers, there is little question that releases have dropped and that TRI reporting is, at least in part, the cause of that reduction.

Several explanations are offered as to why TRI could have caused these changes. Both EPA staff and industry representatives acknowledge that, in many cases, the reporting and subsequent publication of release data was the first time that company management, especially those higher in the executive ranks, had seen the volume of releases from their plants. Simple economics drove them to try to recover more of the substances being released. A second explanation is that those running the plants want to be good corporate citizens and, economics aside, wanted to look better in the public eye. A third explanation is that the data helped focus agency enforcement actions.

Evidence of changes in public agency policy or behaviour is far harder to come by and, to the extent that it exists, is purely anecdotal. No instances could be found where, as a consequence of the TRI data, there was an empirical basis for new legislation at the federal or state level. In one case, an industry representative privately acknowledged that TRI data had been instrumental in helping stop a proposed law to regulate some substance, but more specific information was not available. TRI has been used effectively, however, at the local level, to bring pressure to bear on agency enforcement activities. One community activist reported an instance where, using TRI data on plant releases, an organisation was able to focus its energies in an area where a plant appeared to have an inordinately high number of accidental releases. By asking members of the community to keep diaries of instances when they noticed noxious odours or became ill and comparing those to reported releases, the community organisation was able to identify violations (*e.g.* failures to report or unusual patterns of accidental releases) and EPA ultimately took action by fining the offenders. Community activists also report that, because the affected community was is a low-income area, the affected residents were not economically in a position to relocate and put themselves out of harm's way. Thus, changing private behaviour was not an option.

Annual publication of TRI data invariably produces a great deal of interest in the press, especially in those states and communities where there are large volumes of toxic releases. States are anxious to see where they rank and all parties prepare carefully for the annual press barrage. Again, it is not clear to what extent these annual stories result in any sustained reaction in the political system.

A crude measure of the importance of efforts like TRI and Envirofacts is the effect they have on Freedom of Information Act (FOIA) requests. FOIA is largely a passive statute, requiring individuals to identify records that they wish to see and then to request them. This can also be costly from the agency's perspective since each request is a unique transaction or case – albeit patterns emerge. One EPA staff person reported that, as a result of efforts like Envirofacts, the volume of FOIA requests that it receives in his area has decreased. Overall EPA FOIA requests have remained level over the past several years but, it was the impression of staff working on TRI – no statistics were available – that TRI FOIA requests had gone down.

Issues and Concerns

Meetings with EPA staff and other stakeholders raised a range of issues and concerns:

– *Developing a constituency for access.* An early challenge, especially for Envirofacts, was the absence of an organised constituency and funding in support of these initiatives. Efforts to release information, especially to cross-organisational lines, met with indifference and occasionally hostility within the agency. That changed to some degree when information dissemination became a priority for the political administration. When those currently involved with the system were asked whether they feared that a change in administration could result in a serious retrenchment, especially if it was seen as the relic of a previous political regime they asserted that the system was now widely accepted and valued and not quite as vulnerable. TRI, on the other

hand, because it was grounded in a legal mandate, faced no similar problems. While the regulated community may not have been enthusiastic about reporting, it was difficult to make that argument publicly and reporting was seen as a preferred alternative to more aggressive regulation.

– *Public understanding and use of what is disclosed.* Stakeholders on all sides raised a common concern: the inability of the affected publics to understand what is being disseminated and therefore, to make rational use of the information. This issue arises in two ways. Industry is concerned that release is seen as being the same as risk, and thus even what they would argue to be benign releases will sometimes cause great public consternation. Others would agree, in part, but would assert that the real answer is better data integration, e.g. release public health toxicity information along with the release information so that individuals can make an informed judgement as to the risks.

  A related problem, voiced by a number of information-providers, is the public's ability to comprehend complex statistical information and the concept of risk (Paulos, 1990). One public official expressed dismay and frustration that there was not greater public use of these data. Intermediaries, like the Environmental Defense Fund through its Environmental Scorecard, play a significant role in helping the public interpret the data provided by EPA. Yet another factor militating against use of TRI data is the fact that the major sources of toxic releases in a community are often also major employers and important to the economic well-being of the community.

– *Retail vs. Wholesale*. While many argue that agencies should provide more explanation, interpretation and analysis like TRI to prevent misunderstanding and undue alarm, others contend that such analysis encourages politicisation. Instead, they contend that intermediaries, especially NGOs, should provide the analysis.

– *Timeliness of information release*. A consistent complaint among the NGOs was the time lag from the reporting period to submission to release – TRI data are submitted six months after the end of the year and not released until nearly nine months after that, or 15 months after the year that they describe. EPA argues that it needs that amount of time to clean up the data. Some NGOs argue that the basic data should be released within 60 to 90 days and that any analyses should be produced subsequently.

– *Information vs. regulation*. While there was little contention about the importance and utility of systems like TRI and Envirofacts, some in the environmental community expressed concern that information disclosure programmes alone were not sufficient but might be seen as alternatives to more interventionist regulatory strategies, such as standard-setting and permitting. Indeed, one industry representative acknowledged that the existence of TRI has been used as an argument against other, more regulatory approaches. One NGO representative described it as a "complementary strategy" with enforcement and noted that "requiring the generation of information is a unique role of government" that can create important tools for concerned groups to bring pressure for action.

– *The "mosaic" issue.* A concern raised by critics of TRI and other similar systems that provide information on potential threats to a community is that the information will be used by terrorists. This issue came to the fore recently in connection with the publication of "worst case scenarios." Under the Clean Air Act Amendments of 1990, certain chemical facilities must report risk management plans (RMPs) to prevent and respond to chemical accidents in the United States. Each facility's Plan must include, among other things, a worst-case chemical release and more-likely "alternative release" scenario, as well as information about chemical accidents that have occurred in the past five years. The statute specifically required that these be shared with the community. The initial publication of RMPs raised great concern in the law enforcement community and great pressure on EPA to restrict dissemination. Advocates for disclosure argue that terrorists will be sufficiently resourceful to obtain what they want and that any restrictions will more likely inhibit the ability of public interest groups to analyse risks and potential abuses. In the case of the RMP issue, in the Summer of 1999, the US Congress enacted legislation to amend the Clean Air Act and significantly curtail the release of the plans (see *http://www.epa.gov/ceppo/whatnew.html*). According to one NGO spokesperson: "Industry has been

making headway in re-framing the debate and undermining right to know by legitimising the 'mosaic' effect notion that disparate pieces of information can be brought together and used for a harmful purpose."

Conclusions

This study, albeit limited, suggests several conclusions about how the role of information is changing the nature of citizen participation in government:

– Technology has undoubtedly increased the volume of information available to citizens and especially to NGOs. Whether this effort at electronic openness has altered the perception of fairness remains to be seen.

– Increased availability of information may heighten the need for NGOs and other intermediaries to help individuals and small groups sift through the data now available. This assistance is required both to find the information and to understand and interpret it.[35]

– At least in the short run, the increased availability of information about the environment appears to be having a greater effect on private behaviour than on public policy.

– The need for traditional approaches to consultation has not diminished and may in fact increase as a result of greater electronic access to the policy process.

CONTACT LIST

The following people were most helpful in the researching and writing of this paper:

Public Officials (Federal government)

BYRON, Jeff – Former Envirofacts Manager, EPA

GARVEY, Pat – Envirofacts Manager, EPA

HARMAN, John – Environmental Protection Specialist, EPA (with Peter South)

HAZEN, Susan – Acting Director of the Office of Pesticide Programs, EPA

MARTIN, Rick – Director of the National Technology Services Division, EPA

PESACHOWITZ, Alvin – Chief Information Officer, EPA (with Emma McNamara and Joe Anderson)

TRAVERS, Linda – Deputy Director, Office of Analysis and Information Access, Office of Environmental Information, EPA

WEISS, Peter Senior – Policy Analyst, U.S. Office of Management and Budget, Executive Office of the President

Public Officials (State governments)

BRADFORD, Brent C. – Deputy Director, Department of Environmental Quality, State of Utah

NELSON, Kimberly – Director of Programme Integration and Effectiveness, Department of Environment Protection, State of Pennsylvania

Interest groups

BLUM, Rick – Policy Analyst, OMB Watch

BURNHAM, David – Co-director, Transactional Records Clearinghouse

FLORINI, Karen – Senior Attorney, Environmental Defense Fund

ISAACS, David – Director of Environment Affairs and Deputy General Counsel, Electronics Industries Association

MAYHEW, Joel – Vice-President Regulatory and Technical Affairs, Chemical Manufacturers Association

ORUM, Paul, Co-ordinator – Working Group on Community Right-to-Know

SUBRA, Wilma – Technical Advisor to the Louisiana Environmental Action Network

BIBLIOGRAPHY

Websites

Access America
(*http://www.accessamerica.gov/*)

America*Speaks*
(*http://www.americaspeaks.org/*)

Environmental Council of States
(*http://www.sso.org/ecos/*)

Environmental Defense Fund's Environmental Scorecard
(*http://www.scorecard.org/*)

Environmental Protection Agency
(*www.epa.gov/*)

Major environmental laws
(*http://www.epa.gov/epahome/laws.htm*)

Envirofacts
(*http://www.epa.gov/enviro*)

Office of Environmental Information
(*http://www.epa.gov/info-org/background.htm*)

Surf your watershed
(*http://www.epa.gov/surf/*)

Federal Advisory Committee Act
(*http://policyworks.gov/org/main/mc/index.htm*)

The Right to Know Network
(*http://www.rtk.net/*)

Transactional Records Access Clearinghouse
(*http://trac.syr.edu/*)

Web, White and Blue
(*http://www.webwhiteblue.org/*)

Publications

PAULOS, J.A. (1990),
Innumeracy: Mathematical Illiteracy and Its Consequences, Vintage Books.